H-1814.1	

SUBSTITUTE HOUSE BILL 1011

State of Washington 59th Legislature 2005 Regular Session

By House Committee on Technology, Energy & Communications (originally sponsored by Representatives Morris, Hudgins, Linville and B. Sullivan) READ FIRST TIME 02/21/05.

- 1 AN ACT Relating to distributed generation interconnection
- 2 procedures and net metering provisions; amending RCW 80.60.010,
- 3 80.60.020, and 80.60.030; and adding a new chapter to Title 19 RCW.
- 4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- 5 <u>NEW SECTION.</u> **Sec. 1.** The legislature finds it is in the public
- 6 interest to adopt this chapter to simplify the process of
- 7 interconnecting distributed generation facilities that will be used for
- 8 net metered customers. This chapter is intended to both identify a
- 9 class of distributed generators that, because of their selected point
- 10 of common coupling, can be interconnected with ease and expedition as
- 11 well as the standard procedures to be used for ordinary
- 12 interconnections by all utilities.
- 13 <u>NEW SECTION.</u> **Sec. 2.** The definitions in this section apply
- 14 throughout this chapter unless the context clearly requires otherwise.
- 15 (1) "Applicant" means a person who has filed an application to
- 16 interconnect a customer-generator facility to an electric delivery

17 system.

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(2) "Area network" means a type of electric delivery system served by multiple transformers interconnected in an electrical network circuit generally used in large metropolitan areas that are densely populated to provide high reliability of service and having the same definition as the term "secondary grid network" as defined in the institute of electrical and electronic engineers standards.

- (3) "Class I energy" means electrical energy generation. It may include all types of generation.
 - (4) "Commission" means the utilities and transportation commission.
- (5) "Consumer-owned utility" includes a municipal electric utility formed under Title 35 RCW, a public utility district formed under Title 54 RCW, an irrigation district formed under chapter 87.03 RCW, a cooperative formed under chapter 23.86 RCW, a mutual corporation or association formed under chapter 24.06 RCW, a port district formed under Title 53 RCW, or a water-sewer district formed under Title 57 RCW, that is engaged in the business of distributing electricity to one or more retail electric customers in the state.
- (6) "Customer-generator" means a residential or commercial customer that generates electricity, typically on the customer's side of the meter.
 - (7) "Customer-generator facility" means the equipment used by a customer-generator to generate, manage, and monitor electricity. A customer-generator facility typically includes an electric generator and/or an equipment package.
- (8) "Electric delivery system" means the infrastructure constructed and maintained by an electric utility to deliver electric service to end-users.
- 28 (9) "Electric utility" means a consumer-owned or investor-owned 29 utility.
 - (10) "Equipment package" means a group of components connecting an electric generator with an electric delivery system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric source.
- 35 (11) "Fault current" means electrical current that flows through a 36 circuit and is produced by an electrical fault, such as to ground, 37 double-phase to ground, three-phase to ground, phase-to-phase, and

three-phase. A fault current is several times larger in magnitude than the current that normally flows through a circuit.

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- (12) "Good utility practice" means any of the practices, methods, and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods, and acts that, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. "Good utility practice" is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 14 (13) "Group" means the interconnection technical advisory work 15 group established under section 6 of this act.
 - (14) "Interconnection agreement" means an agreement between a customer-generator and an electric utility, that governs the connection of the customer-generator facility to the electric delivery system, as well as the ongoing operation of the customer-generator facility after it is connected to the system.
 - (15) "Investor-owned utility" means a corporation owned by investors that meets the definition of corporation in RCW 80.04.010 and is engaged in distributing electricity to more than one retail electric customer in the state.
 - (16) "Minor system modifications" include activities such as changing the fuse in a fuse holder cut-out, changing the settings on a circuit recloser, and other activities that usually entail less than four hours of work and one thousand dollars in materials.
 - (17) "Point of common coupling" means the point in the interconnection of a customer-generator facility with an electric delivery system at which the harmonic limits are applied.
- 32 (18) "Spot network" means a type of electric delivery system that 33 uses two or more intertied transformers to supply an electrical network 34 circuit. A spot network is generally used to supply power to a single 35 customer or a small group of customers.
- **Sec. 3.** RCW 80.60.010 and 2000 c 158 s 1 are each amended to read 37 as follows:

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The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.

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- (1) "Commission" means the utilities and transportation commission.
- (2) "Customer-generator" means a user of a net metering system.
- 5 (3) "Electrical company" means a company owned by investors that 6 meets the definition of RCW 80.04.010.
 - (4) "Electric cooperative" means a cooperative or association organized under chapter 23.86 or 24.06 RCW.
- 9 (5) "Electric utility" means any electrical company, public utility 10 district, irrigation district, port district, electric cooperative, or 11 municipal electric utility that is engaged in the business of 12 distributing electricity to retail electric customers in the state.
- 13 (6) "Irrigation district" means an irrigation district under 14 chapter 87.03 RCW.
- 15 (7) "Municipal electric utility" means a city or town that owns or operates an electric utility authorized by chapter 35.92 RCW.
 - (8) "Net metering" means measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer-generator that is fed back to the electric utility over the applicable billing period.
- 21 (9) "Net metering system" means a fuel cell or a facility for the 22 production of electrical energy that:
 - (a) Uses as its fuel either solar, wind, or hydropower;
- 24 (b) Has a generating capacity of not more than ((twenty five)) one 25 hundred kilowatts;
 - (c) Is located on the customer-generator's premises;
- 27 (d) Operates in parallel with the electric utility's transmission 28 and distribution facilities; and
- 29 (e) Is intended primarily to offset part or all of the customer-30 generator's requirements for electricity.
- 31 (10) "Port district" means a port district within which an 32 industrial development district has been established as authorized by 33 Title 53 RCW.
- 34 (11) "Public utility district" means a district authorized by 35 chapter 54.04 RCW.
- 36 **Sec. 4.** RCW 80.60.020 and 2000 c 158 s 2 are each amended to read 37 as follows:

An electric utility:

- (1) Shall offer to make net metering available to eligible customers-generators on a first-come, first-served basis until the cumulative generating capacity of net metering systems equals ((0.1)) one percent of the utility's peak demand during 1996, of which not less than 0.05 percent shall be attributable to net metering systems that use as its fuel either solar, wind, or hydropower;
- (2) Shall allow net metering systems to be interconnected using a standard kilowatt-hour meter capable of registering the flow of electricity in two directions, unless the commission, in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, determines, after appropriate notice and opportunity for comment:
- (a) That the use of additional metering equipment to monitor the flow of electricity in each direction is necessary and appropriate for the interconnection of net metering systems, after taking into account the benefits and costs of purchasing and installing additional metering equipment; and
- (b) How the cost of purchasing and installing an additional meter is to be allocated between the customer-generator and the utility;
- (3) Shall charge the customer-generator a minimum monthly fee that is the same as other customers of the electric utility in the same rate class, but shall not charge the customer-generator any additional standby, capacity, interconnection, or other fee or charge unless the commission, in the case of an electrical company, or the appropriate governing body, in the case of other electric utilities, determines, after appropriate notice and opportunity for comment that:
- (a) The electric utility will incur direct costs associated with interconnecting or administering net metering systems that exceed any offsetting benefits associated with these systems; and
- 31 (b) Public policy is best served by imposing these costs on the 32 customer-generator rather than allocating these costs among the 33 utility's entire customer base.
- **Sec. 5.** RCW 80.60.030 and 1998 c 318 s 4 are each amended to read as follows:
- Consistent with the other provisions of this chapter, the net energy measurement must be calculated in the following manner:

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1 (1) The electric utility shall measure the net electricity produced 2 or consumed during the billing period, in accordance with normal 3 metering practices.

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- (2) If the electricity supplied by the electric utility exceeds the electricity generated by the customer-generator and fed back to the electric utility during the billing period, the customer-generator shall be billed for the net electricity supplied by the electric utility, in accordance with normal metering practices.
- (3) If electricity generated by the customer-generator exceeds the electricity supplied by the electric utility, the customer-generator:
- (a) Shall be billed for the appropriate customer charges for that billing period, in accordance with RCW 80.60.020; and
- (b) Shall be credited for the excess kilowatt-hours generated during the billing period, with this kilowatt-hour credit appearing on the bill for the following billing period.
- 16 ((At the beginning)) On April 30th of each calendar year, any 17 remaining unused kilowatt-hour credit accumulated during the previous 18 year shall be granted to the electric utility, without any compensation 19 to the customer-generator.
- NEW SECTION. Sec. 6. (1) There is hereby created the interconnection technical advisory group.
 - (2) Membership of the group shall consist of one representative from each of the investor-owned utilities in the state, one representative from a consumer-owned utility in the state, one representative from an electric cooperative in the state, and one representative from a municipal utility in the state. The group shall elect a chair from among its members.
 - (3) Members of the group shall serve without compensation.
 - (4) Beginning on the effective date of this act, the group shall meet to establish majority agreement on standard technical requirements for interconnection at each level established under section 8 of this act.
 - (5) By January 1, 2006, the group shall submit the technical standards to the commission, to the governing body of each consumerowned utility, and to the appropriate committees of the legislature.
- 36 (6) The commission and the governing body of each consumer-owned 37 utility shall adopt the technical standards. If the governing body of

- each consumer-owned utility does not adopt the technical standards 1 2 within sixty days of receiving the technical standards from the group, the members of the governing body are each subject to a penalty in the 3 amount of one hundred dollars per day until the governing body adopts 4 the standards. After January 1, 2006, the group shall continue to meet 5 every July 15th to update agreement on standard technical requirements 6 7 for interconnection at each level established under section 8 of this 8 act.
- 9 NEW SECTION. Sec. 7. If the group does not, by October 1, 2006, 10 establish agreement on standard technical requirements interconnection at each level established under section 8 of this act, 11 the commission may adopt rules by January 1, 2007, to establish 12 standard technical requirements for interconnection at each level 13 established under section 8 of this act. 14
- 15 <u>NEW SECTION.</u> **Sec. 8.** There are four interconnection review paths 16 for interconnection of customer-sited generation.

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- (1) Simplified. This is for facilities certified under section 9 of this act with a power rating of ten kilowatts or less, where the primary distribution line configuration is single-phase and for facilities certified under section 9 of this act with a power rating of one hundred kilowatts or less, where the primary distribution line configuration is three-phase.
 - (2) Expedited. This is for facilities certified under section 9 of this act that have a power rating between ten kilowatts and one hundred kilowatts where the primary distribution line configuration is single-phase and for facilities certified under section 9 of this act that have a power rating between one hundred kilowatts and three hundred kilowatts where the primary distribution line configuration is three-phase.
- 30 (3) Intermediate. This is for facilities certified under section 31 9 of this act that have a power rating between three hundred kilowatts 32 and one megawatt where the primary distribution line configuration is 33 three-phase.
- 34 (4) Standard. This is for all generating facilities not qualifying 35 for simplified, expedited, or intermediate interconnection that have a 36 power rating of ten megawatts or less.

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NEW SECTION. Sec. 9. (1) To qualify for simplified, expedited, or intermediate interconnection procedures, generators no larger than one megawatt must be certified under subsection (2) of this section to comply with the following codes and standards as applicable:

- (a) The institute of electrical and electronic engineers' 1547 standard for interconnecting distributed resources with electric power systems or 929 standard for inverters less than ten kilowatts in size; and
- 9 (b) UL 1741 inverters, converters, and controllers for use in independent power systems.
 - (2) An equipment package is certified for interconnected operation if it has been submitted by a manufacturer, tested and listed by a nationally recognized testing and certification laboratory for continuous interactive operation with a utility grid in compliance with the applicable codes and standards listed in subsection (1) of this section.
 - (3) If the equipment package has been tested and listed as an integrated package, which includes a generator or other electric source, it shall not require further design review, testing, or additional equipment to meet the certification requirements of this interconnection procedure.
 - (4)(a) If the equipment package includes only the interface components such as switchgear, inverters, or other interface devices, then an interconnection applicant must show that the generator or other electric source being used with the equipment package is compatible with the equipment package and consistent with the testing and listing specified for the package.
 - (b) If the generator or electric source combined with the equipment package is consistent with the testing and listing performed by the nationally recognized testing and certification laboratory, no further design review, testing, or additional equipment is required to meet the certification requirements of this interconnection procedure. A certified equipment package does not include equipment provided by the utility.
 - (5) To qualify for simplified, expedited, or intermediate interconnection, the aggregated generation, including the proposed generator, will not:
 - (a) Exceed ten percent of the total circuit annual peak load;

1 (b) Contribute more than ten percent to the distribution circuit's 2 maximum fault current at the point on the high voltage primary level 3 nearest the proposed point of common coupling; and

- (c) Compromise the operation of system safety protective devices.
- NEW SECTION. Sec. 10. Each electric utility shall have a simplified interconnection procedure for facilities certified under section 9 of this act that have a power rating of ten kilowatts or less, where the primary distribution line configuration is single-phase and for facilities certified under section 9 of this act with a power rating of one hundred kilowatts or less, where the primary distribution line configuration is three-phase.
 - (2) The simplified procedure shall require the following steps:
- (a) The customer-generator submits an application filled out properly and completely;
- (b) The electric utility shall acknowledge to the customergenerator receipt of the application within three business days of receipt of the application;
- (c) The electric utility evaluates the application for completeness and notifies the customer-generator within three business days of acknowledging receipt of the application that the application is or is not complete. If incomplete, the application is rejected and returned to the customer with a list of items needed to make it complete;
- (d) If the proposed interconnection meets technical requirements for simplified interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, within three business days of notifying the customer-generator that the application is complete, the electric utility will execute and send a simplified interconnection agreement to the customer-generator;
- (e) The customer-generator shall return the signed agreement within three business days of receiving the agreement from the electric utility;
- (f) Within sixty business days after returning the signed agreement to the electric utility, the customer-generator shall install the approved generating facility and notify the electric utility that the installation is complete;
- (g) Within ten business days of receiving notice of completion of installation, the electric utility may inspect a generating facility

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for compliance with the technical standards established by the group under section 6 of this act or the commission under section 7 of this act and may arrange for a witness test;

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- (h) If the inspection and test are satisfactory, within three business days of completing the inspection, the electric utility will notify the customer-generator in writing that interconnection is allowed and approved;
- (i) If the inspection and test are not satisfactory, within three business days of completing the inspection and test, the electric utility will notify the customer and the customer-generator shall correct the technical requirements within sixty business days; and
- (j) Customer-generators who do not receive any notice from the electric utility within fifteen business days of the inspection and test are deemed approved for interconnection.
- (3) The simplified interconnection is provided at a total cost to the customer-generator not to exceed twenty-five dollars.
- (4) Additional protection equipment not included with the certified generator or interconnection equipment package may be added at the electric utility's discretion if the performance of the system is not negatively impacted in any way and the customer-generator is not charged for equipment in addition to that which is included in the certified equipment package.
- NEW SECTION. Sec. 11. (1) Each electric utility shall have an expedited interconnection procedure for facilities certified under section 9 of this act that have a power rating between ten kilowatts and one hundred kilowatts where the primary distribution line configuration is single-phase and for facilities certified under section 9 of this act that have a power rating between one hundred kilowatts and three hundred kilowatts where the primary distribution line configuration is three-phase.
 - (2) The expedited procedure shall require the following steps:
- (a) To assist customers in the interconnection process, the electric utility will designate an employee or office from which basic application information can be obtained through an informal process;
- (b) Within three business days of a request for an application, the electric utility will provide the applicant with all relevant forms,

documents, and technical requirements for filing a complete application for interconnection;

- (c) Upon the applicant's request, the electric utility will meet with the applicant before submission of an application for expedited interconnection;
- (d) The applicant shall submit an application filled out properly and completely to the electric utility and may, at the same time, submit an interconnection agreement executed by the applicant;
- (e) Within three business days of receipt of the application, the electric utility shall acknowledge to the applicant receipt of the application;
- (f) The electric utility will notify the applicant within ten business days of its receipt of the application whether the application is complete or incomplete. If the application is incomplete, the electric utility will at the same time provide the applicant with a written list detailing all information that must be provided to complete the application;
- (g) An applicant will have ten business days to submit the missing information following receipt of the notice. If the applicant does not submit the listed information to the electric utility within ten business days, the application shall be deemed withdrawn;
- (h) An application will be complete upon the applicant's submission of the information identified in the electric utility's written list. The electric utility shall acknowledge to the customer-generator receipt of the application within three business days of receiving the information identified in the electric utility's written list;
- (i) Within ten business days after the electric utility notifies the applicant it has received a complete application, the electric utility shall perform an initial review of the proposed interconnection. Initial review shall include the following:
- 31 (i) Review using the technical standards established by the group 32 under section 6 of this act or by the commission under section 7 of 33 this act;
- (ii) Notice to the applicant of the results, including copies of the analysis and data underlying the electric utility's determinations; and
 - (iii) Notice to the applicant of the results of any additional

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studies or tests the electric utility deems necessary to evaluate the proposed interconnection, conducted at the electric utility's own expense;

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- (j) If the initial review determines that the proposed interconnection meets the technical requirements for interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, the interconnection application will be approved and the electric utility will provide the applicant with an executable interconnection agreement within five business days after the determination;
- (k) Τf initial review determines that t.he the proposed interconnection does not meet the technical requirements interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, but the electric utility determines through the initial review that the small generator may nevertheless be interconnected consistent with safety, reliability, and power quality standards, with or without minor system modifications, the electric utility will provide the applicant with an executable interconnection agreement within five business days after determination and the generator is responsible for the cost of any minor system modifications required;
- (1) If the initial review determines that the proposed interconnection does not meet the technical requirements for interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, and the electric utility does not or cannot determine from the initial review that the generator may nevertheless be interconnected consistent with safety, reliability, and power quality standards, then the electric utility shall:
- (i) Offer to perform an additional review if the electric utility concludes that an additional review might determine that the proposed interconnection could qualify for interconnection pursuant to the expedited technical requirements; and
- (ii) Provide a nonbinding, but good faith estimate of the costs of the additional review when it notifies the applicant that its proposed interconnection is not approved under initial review;
- 36 (m) Within three business days of receiving an executable 37 interconnection agreement from the electric utility, the applicant

shall return the signed interconnection agreement to the electric utility;

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- (n) Within one hundred twenty business days after returning the signed agreement to the electric utility, the customer shall install the approved generating facility and notify the electric utility in writing that the installation is complete;
- (o) Within ten business days of receiving written notice of completion of installation, the electric utility may inspect a generating facility for compliance with the technical standards established by the group under section 6 of this act or by the commission under section 7 of this act and may arrange for a witness test;
- (p) If the inspection and test are satisfactory, within three business days of completing the inspection, the electric utility will notify the customer in writing that interconnection is allowed and approved; and
- (q) If the inspection and test are not satisfactory, within three business days of completing the inspection and test, the electric utility will notify the customer and, within sixty business days, the customer-generator shall correct the installation as required under the technical requirements established by the group under section 6 of this act or by the commission under section 7 of this act.
- 23 (3) Fees for application and processing may be charged consistent 24 with the following:
 - (a) An application and processing fee may be imposed on customergenerators proposing interconnection of generators under expedited interconnection procedures if the total of all fees to complete the interconnection does not exceed fifty dollars plus one dollar per kilowatt of the capacity of the proposed generator;
 - (b) Additional fees may only be charged to customer-generators if their generator interconnection requires minor system modifications under subsection (2)(k) of this section or additional review under subsection (2)(1) of this section; and
- 34 (c) Hourly engineering fees for additional review may not exceed 35 one hundred dollars per hour.
- NEW SECTION. Sec. 12. (1) Each electric utility shall have an intermediate interconnection procedure for facilities certified under

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section 9 of this act that have a power rating between three hundred kilowatts and one megawatt where the primary distribution line configuration is three-phase.

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- (2) The intermediate procedure shall consist of the following steps:
- (a) To assist applicants in the interconnection process, the electric utility will designate an employee or office from which basic information on the application can be obtained through an informal process;
- 10 (b) Within three business days of a request for an application, the 11 electric utility will provide the applicant with all relevant forms, 12 documents, and technical requirements for filing a complete application 13 for interconnection;
- 14 (c) Upon the applicant's request, the electric utility will meet 15 with the applicant before submission of an application for 16 interconnection;
 - (d) The applicant shall submit an application filled out properly and completely for expedited interconnection to the electric utility and may, at the same time, submit an interconnection agreement executed by the applicant;
 - (e) Within three business days of receipt of the application, the electric utility shall acknowledge to the applicant receipt of the application;
 - (f) Within ten business days of receiving the application, the electric utility will notify the applicant of its receipt of the application and whether it is complete or incomplete. If the application is incomplete, the electric utility will at the same time provide the customer-generator a written list detailing all information that must be provided to complete the application;
 - (g) The applicant will have ten business days to submit the missing information following receipt of the notice. If the applicant does not submit the listed information to the electric utility within the ten business days, the application shall be deemed withdrawn;
- (h) An application will be complete upon the applicant's submission of the information identified in the electric utility's written list.

 The electric utility shall acknowledge to the applicant receipt of the application within three business days of receiving the information identified in the electric utility's written list;

(i) Within ten business days after the electric utility notifies the applicant it received a complete application, the electric utility shall perform an initial review of the proposed interconnection. Initial review shall include the following:

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- (i) Review using the technical requirements established by the group under section 6 of this act or by the commission under section 7 of this act;
- (ii) Notice to the applicant of the results, including copies of the analysis and data underlying the electric utility's determinations; and
- (iii) Any additional studies or tests the electric utility deems necessary to evaluate the proposed interconnection, conducted at the electric utility's own expense;
- (j) If the initial review determines that the proposed interconnection meets the technical requirements for interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, the interconnection application will be approved and the electric utility will provide the applicant an executable interconnection agreement within five business days after the determination;
- Ιf initial review determines that (k) the the proposed interconnection does not meet the technical requirements for interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, but the electric utility determines through the initial review that the small generator may nevertheless be interconnected consistent with safety, reliability, and power quality standards, with or without minor system modifications, the electric utility will provide the applicant an executable interconnection agreement within five business days after the determination and the generator is responsible for the cost of any minor system modifications required;
- (1) If the initial review determines that the proposed interconnection does not meet the technical requirements for interconnection established by the group under section 6 of this act or by the commission under section 7 of this act, and the electric utility does not or cannot determine from the initial review that the generator may nevertheless be interconnected consistent with safety, reliability, and power quality standards, then the electric utility shall:

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- (i) Offer to perform an additional review if the electric utility concludes that an additional review might determine that the generator could qualify for interconnection pursuant to the expedited procedures; and
 - (ii) Provide a nonbinding, but good faith estimate of the costs of the additional review when it notifies the customer its proposed interconnection does not meet technical requirements for interconnection;

- (m) Within three business days of receiving an executable interconnection agreement from the electric utility, the applicant shall return the signed agreement to the electric utility;
- (n) Within one hundred twenty business days after returning the signed agreement, the customer-generator shall install the approved generating facility and notify the electric utility that the installation is complete;
- (o) Within ten business days of receiving notice of completion of installation, the electric utility may inspect a generating facility for compliance with the technical requirements established by the group under section 6 of this act or by the commission under section 7 of this act and may arrange for a witness test;
- (p) If the inspection is satisfactory, within three business days of completing the inspection, the electric utility will notify the customer in writing that interconnection is allowed and approved; and
- (q) If the inspection and test is not satisfactory, within three business days of completing the inspection, the electric utility will notify the customer-generator and the customer-generator shall correct the installation as required under the technical requirements established by the group under section 6 of this act or by the commission under section 7 of this act.
- (3) Fees for application and processing may be charged consistent with the following:
 - (a) An application and processing fee may be imposed on customergenerators proposing interconnection of generators under expedited interconnection procedures if the total of all fees to complete the interconnection does not exceed fifty dollars plus one dollar per kilowatt of the capacity of the proposed generator;
 - (b) Additional fees may only be charged to customer-generators if

- their generator interconnection requires minor system modifications under subsection (2)(k) of this section or additional review under subsection (2)(1) of this section;
 - (c) Costs for minor system modifications or additional review will be based on quotations for services from the electric utility; and
- 6 (d) Hourly engineering fees for additional review may not exceed 7 one hundred dollars per hour.

- NEW SECTION. Sec. 13. Each electric utility shall have a standard interconnection procedure available for generators not exceeding ten megawatts in capacity that do not qualify for simplified, expedited, or intermediate interconnection procedures, which shall consist of the following:
- (1) The applicant submits an application filled out properly and completely for standard interconnection, or an applicant's interconnection application is transferred from simplified, expedited, or intermediate interconnection procedures for failure to meet all of the requirements of those procedures;
- (2) The electric utility shall acknowledge receipt of the application or the transfer from simplified, expedited, or intermediate interconnection procedures within three business days;
- (3) The electric utility will notify the applicant within the ten business days of receipt of the application whether the application is complete or incomplete. If the application is incomplete, the electric utility will at the same time provide the applicant a written list detailing all information that must be provided to complete the application;
- (4) The applicant will have ten business days to submit the listed information following receipt of notice from the electric utility that the application is incomplete. If the applicant does not submit the listed information to the electric utility within the ten business days, the application shall be deemed withdrawn;
- (5) Within twenty business days of notifying the customer-generator that the application is complete, the electric utility will conduct an initial review. Initial review shall include:
- 35 (a) Review using the requirements established by the group under section 6 of this act or by the commission under section 7 of this act;

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1 (b) A scoping meeting or discussion with the customer-generator to review the application; and

- (c) Review of information such as the available fault current at the proposed location, the existing peak loading on the lines in the general vicinity of the proposed generator, and the configuration of the distribution lines at the proposed point of interconnection;
- (6) At the applicant's request, the electric utility will undertake a feasibility study that includes the following:
- (a) A preliminary review of the potential impacts on the distribution system that will result from the proposed interconnection;
 - (b) A preliminary review to determine transmission impacts; and
- (c) A preliminarily review of short circuit currents including contribution from the proposed generator as well as coordination of and potential overloading of distribution circuit protection devices;
- (7) After completing the feasibility study, the electric utility shall provide an impact study agreement, including a cost estimate for an impact study, consistent with the following:
- (a) Where the proposed interconnection may affect electric transmission or distribution systems other than that of the electric utility where the interconnection is proposed, the electric utility shall coordinate, but not be responsible for the timing of any studies required to determine the impact of the interconnection request on other potentially affected electric systems. The customer will be responsible to any other affected systems for all costs of any additional studies incurred by any other affected system to evaluate the impact of the proposed generator interconnection;
- (b) For generators greater than two megawatts, the impact study may require analysis of power flows and other impacts on the transmission system if the utility has a reasonable belief that the interconnection of the generator will create power flows that reach the transmission system;
- (c) Transmission system impact studies will be governed by separate procedures that may include submission of an application into a transmission interconnection queue; and
- (d) Each electric utility will identify the circumstances under which generators larger than two megawatts must submit their application into a transmission interconnection queue;
 - (8) The elements of an impact study should include:

1 (a) Load flow study;

- 2 (b) Short-circuit study;
- 3 (c) Circuit protection and coordination study;
 - (d) Impact on system operation;
- 5 (e) Stability study and the conditions that would justify including 6 this element in the impact study; and
 - (f) Voltage collapse study and the conditions that would justify including this element in the impact study;
 - (9) Once the applicant executes the impact study agreement, returns it to the electric utility, and pays pursuant to the good faith estimate contained in the agreement, the electric utility will conduct the impact study;
 - (10) An electric utility that charges a fee for an impact study shall provide the applicant with a bill consistent with the following:
 - (a) The bill shall include a clear explanation of all charges; and
 - (b) The electric utility shall provide to the applicant, before the start of the impact study, a good faith estimate of the number of hours that will be needed to complete the interconnection study, and an estimate of the total interconnection study fee;
 - (11) For generators with equipment that is certified pursuant to section 9 of this act, no review of the generator's protection equipment is required and an electric utility may review a certified generator's protection scheme, but it cannot charge for such review;
 - (12) If the electric utility determines, in accordance with good utility practices, that any electric utility electric system modifications required to accommodate the proposed interconnection are not substantial, the impact study will identify the scope and cost of the modifications as defined in the study results;
 - (13) If the electric utility determines, in accordance with good utility practices, that the system modifications to the electric utility's electric system are substantial, the results of the impact study will produce an estimate for the modification costs. The detailed costs of, and the electric power supplier's modifications necessary to interconnect the customer's proposed generator will be identified in a facilities study to be completed by the electric utility;
 - (14) If a facilities study is necessary, the electric utility shall

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submit a facilities study agreement, with a good faith estimate of the cost of completing the facilities study to be submitted to the customer-generator;

- (15) Once the applicant executes the facilities study agreement and pays pursuant to the terms thereof, the electric utility will conduct the facilities study;
- (16) Within three business days of completion of the impact and, if necessary, the facilities study, the electric utility shall send the applicant an executable interconnection agreement including a quote for any required electric utility system modifications;
- (17) Within three business days of receiving the interconnection agreement, the applicant shall return the signed interconnection agreement to the electric utility;
- (18) Within one hundred twenty business days, the customer shall complete installation of its generator and send notice of completion to the electric utility and the electric utility shall complete any electric utility system modifications;
- (19) Within ten business days of receiving notice that installation is complete, the electric utility shall inspect the completed generator installation and attend any required commissioning tests;
- (20) Provided any required commissioning tests are satisfactory, within five business days of completing the tests, the electric utility shall notify the customer in writing that interconnection is approved; and
- (21) Fees for application and processing may be charged consistent with the following:
- (a) Fees for standard interconnection review shall include an application fee not to exceed one hundred dollars plus two dollars per kilowatt capacity, as well as charges for actual time spent on the interconnection study;
- 31 (b) Costs for the engineering review may not exceed one hundred 32 dollars per hour; and
- 33 (c) Costs for the electric utility's facilities necessary to 34 accommodate the customer's generator interconnection will be the 35 responsibility of the customer.
- 36 <u>NEW SECTION.</u> **Sec. 14.** (1) Damages in the amount of ten dollars

- per kilowatt capacity of the customer-generator's generating facility applies to an electric utility's failure to comply with procedures established under this act.
 - (2) A customer-generator may bring a civil action in the district court to recover damages, except for damages which exceed the amount specified in RCW 3.66.020.
- NEW SECTION. Sec. 15. (1) Once an interconnection has been approved under this chapter, the electric utility shall not require a customer-generator to test its facility except for the following:
 - (a) An annual test in which the customer-generator's facility is disconnected from the electric utility's equipment to ensure that the generator stops delivering power to the grid; and
 - (b) Any manufacturer-recommended testing.

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- (2) An electric utility may inspect a customer-generator's facility both before and after interconnection approval is granted, at reasonable hours and with reasonable advance notice to the customer-generator.
 - (3) If the electric utility discovers the customer-generator's facility is not in compliance with technical requirements established by the group under section 6 of this act or by the commission under section 7 of this act and the noncompliance adversely affects the safety or reliability of the electric system, the electric utility may require disconnection of the customer-generator's facility until it complies with this chapter.
- NEW SECTION. Sec. 16. Each customer-generator approved for interconnection shall affix to their electric revenue meter a warning sign that notifies utility personnel of the existence of customer sited parallel generation.
- NEW SECTION. Sec. 17. A customer-generator approved for interconnection shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to

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- 1 which the interconnection is made. A customer-generator shall obtain
- 2 additional insurance if necessary as a function of owning and operating
- 3 a generating facility. An electric utility shall not be liable
- 4 directly or indirectly for permitting or continuing to allow an
- 5 attachment of a net metering system, or for the acts or omissions of
- 6 the customer-generator that cause loss or injury, including death, to
- 7 any third party.
- 8 <u>NEW SECTION.</u> **Sec. 18.** (1) The commission or the governing body of
- 9 a consumer-owned utility may from time to time designate a technical
- 10 master for the resolution of interconnection disputes. Parties shall
- 11 use the technical master to resolve disputes related to interconnection
- 12 and such resolution is binding on the parties.
- 13 (2) The commission or the governing body of a consumer-owned
- 14 utility may designate a department of energy national laboratory;
- 15 college or university; or an approved federal energy regulatory
- 16 commission regional transmission organization with distribution system
- 17 engineering expertise as the technical master. Should the federal
- 18 energy regulatory commission identify a national technical dispute
- 19 resolution team, the commission may designate the team as its technical
- 20 master.
- 21 <u>NEW SECTION.</u> **Sec. 19.** If any provision of this act or its
- 22 application to any person or circumstance is held invalid, the
- 23 remainder of the act or the application of the provision to other
- 24 persons or circumstances is not affected.
- NEW SECTION. Sec. 20. Sections 1, 2, and 6 through 19 of this act
- 26 constitute a new chapter in Title 19 RCW.

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